

CLAIMS

1. A transparent polymeric composition having good impact strength, a high modulus, and good heat resistance, comprising
- from 50% to 90% by weight of a thermoplastic matrix (I) with a refractive index n_1 ,
 - from 0 to 40% by weight of an impact additive (II) with a refractive index n_2 , and
 - from 10% to 50% by weight of a block copolymer (III) with a refractive index n_3 ,
- the difference between the refractive indices, taken two by two, being less than or equal to 0.01.
2. The composition of claim 1, characterized in that the block copolymer III conforms to the following general formula - Y-B-Y' - in which
- B is an elastomer block which is thermodynamically incompatible with blocks Y and Y',
 - Y and Y' have or do not have the same chemical composition as one another,
 - at least one of the two blocks Y and Y' is totally or partially compatible with the thermoplastic matrix (I).
3. The composition of claim 2, characterized in that B is obtained by polymerizing at least one monomer selected from butadiene, isoprene, 2,3-dimethyl-1,3-butadiene, 1,3-pentadiene and 2-phenyl-1,3-butadiene.
4. The composition of claim 3, characterized in that B is obtained by polymerizing butadiene.
5. The composition of claim 3, characterized in that B is obtained by polymerizing isoprene.
6. The composition of claim 2, characterized in that Y and Y' are obtained by polymerizing at least one

monomer selected from styrene and short-chain alkyl methacrylates such as methyl methacrylate.

7. The composition of claim 6, characterized in that
5 Y is a block composed predominantly of styrene and in that Y' is a block composed predominantly of methyl methacrylate.

8. The composition of claim 6, characterized in that
10 Y and Y' are blocks composed predominantly of methyl methacrylate.

9. The composition of claim 7, characterized in that
15 Y' contains at least 60% of syndiotactic polymethyl methacrylate.

10. The composition of claim 8, characterized in that
Y and Y' each contain at least 60% of syndiotactic polymethyl methacrylate.

20 11. The composition of claim 1, characterized in that the amorphous matrix I is obtained by polymerizing at least one monomer selected from styrene, acrylonitrile, acrylic acid, and short-chain alkyl (meth)acrylates
25 such as methyl methacrylate.

12. The composition of claim 11, characterized in that I is obtained by polymerizing a mixture composed of 0 to 55% by weight of styrene and from 45% to 100%
30 by weight of methyl methacrylate.

13. The composition of claim 1, characterized in that the additive II is a core-shell copolymer composed of an elastomer core and a rigid shell which is compatible
35 with the amorphous matrix I.

14. An article obtained by the melt-state conversion of the composition of any one of claims 1 to 13, characterized in that the conversion is selected from

the techniques of converting thermoplastic materials such as injection molding, extrusion or calendering.